

Listeriosis

Agent: *Listeria monocytogenes* (bacteria)

Mode of Transmission: Ingestion of contaminated foods or beverages (e.g., soft cheese, unpasteurized milk). Transmission can also occur from mother to fetus if the mother consumes a contaminated food item/beverage during pregnancy.

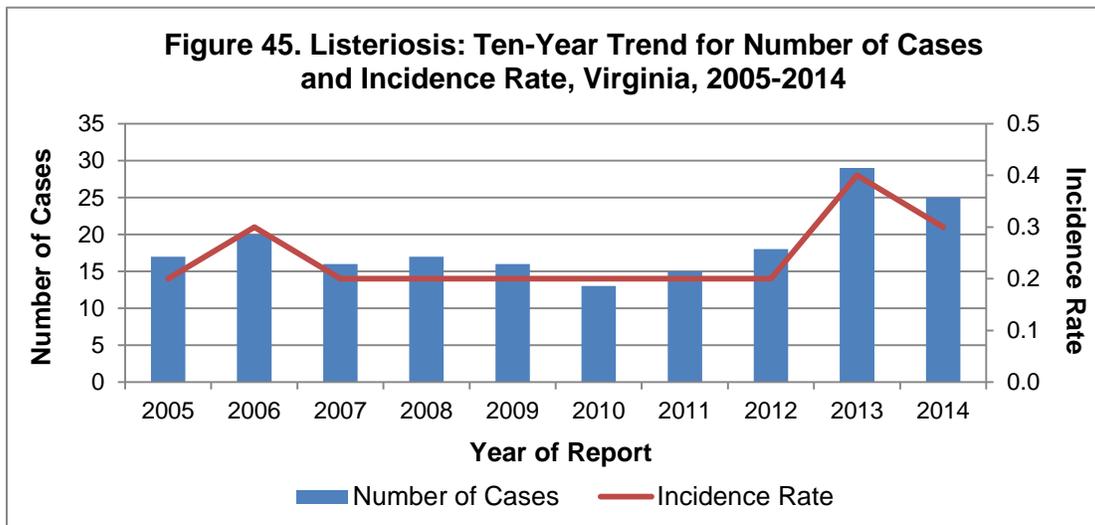
Signs/Symptoms: Typically, fever, headache, muscle aches, and sometimes gastrointestinal symptoms, such as nausea, diarrhea, and vomiting. Infection can lead to serious disease, including shock and inflammation of the brain and the fluid surrounding the brain and spinal cord (i.e., meningitis). Among infected pregnant women, miscarriage, stillbirth, premature delivery, or neonatal infection may occur.

Prevention: Preventive measures include safe food preparation (e.g., thoroughly cooking or reheating food from animal sources and washing raw vegetables) and avoiding raw (unpasteurized) milk and milk products. Persons at higher risk for disease should avoid soft cheeses (unless labeled as made with pasteurized milk), refrigerated smoked seafood (unless contained in a cooked dish), and hot dogs and other deli/luncheon meats (unless heated until steaming hot just before serving).

Other Important Information: Persons at higher risk include pregnant women and their unborn babies and newborns, older adults, and persons with weakened immune systems.

Listeriosis: 2014 Data Summary	
Number of Cases:	25
5-Year Average Number of Cases:	18.2
% Change from 5-Year Average:	+37%
Incidence Rate per 100,000:	0.3

Twenty-five cases of listeriosis were reported in Virginia during 2014. This is slightly fewer than the 29 cases reported in 2013, but higher than the 5-year average of 18.2 cases per year. The statewide incidence rate was 0.3 cases per 100,000, which was lower than the 2013 rate of 0.4 cases per 100,000 (Figure 45). These incidence rates are similar to the average annual incidence of listeriosis in the U.S. of 0.3 cases per 100,000 reported by CDC in 2013.

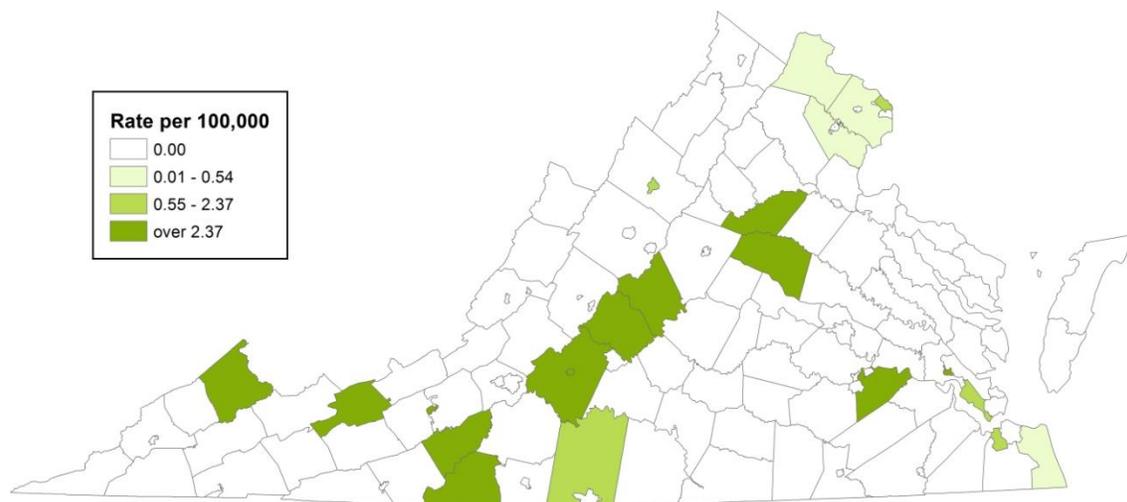


The 60 year and older age group had the most listeriosis cases in 2014, with 19 cases and an incidence rate of 1.2 per 100,000. However, the highest incidence rate reported among all age groups occurred with infants (2 cases, 1.9 per 100,000). Two cases each were reported in the 20-29 and 50-59 year age groups; no cases were reported in any other age group.

Incidence rates were similar across all race populations, with 0.3 per 100,000 in the white and “other” race populations, and 0.2 per 100,000 in the black population. No difference was reported in incidence between females and males (0.3 per 100,000, each). The highest incidence rate occurred in the southwest region at 0.7 per 100,000. The remaining regions had similar rates ranging from 0.1 to 0.3 per 100,000. Incidence rates by locality can be viewed in the map below. Although cases occurred throughout the year, 12 (48%) cases occurred between July and September.

During 2014, all 25 listeriosis cases resulted in hospitalization. Seven cases were associated with death after testing positive for listeriosis, including one female neonate and six adults age 50 years or older. Two infant cases of listeriosis were associated with pregnancy in 2014.¹

Listeriosis Incidence Rate by Locality Virginia, 2014



¹ Per case definitions established by the Council of State and Territorial Epidemiologists, confirmed listeriosis cases must be positive for *Listeria monocytogenes* by laboratory testing. For each mother-infant pair reported in Virginia during 2014, the illness in the infant was counted as a listeriosis case, as lab specimens from each infant were positive for *Listeria monocytogenes*. Presumably the infection in each infant resulted from a contaminated food or beverage item the mother consumed; however, specimens were not collected from either mother and the mothers' illnesses were not counted as cases. Conversely, the Centers for Disease Control and Prevention *Listeria* Initiative Program counts the mother's illness as the case for mother-infant pairs, in recognition that the exposure likely occurred in the mother.